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10/021,602

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Christopher L. Adrien

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EXAMINER

HANDY, DWAYNE K

ART UNIT

PAPER NUMBER

1743

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

03/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/021,602

Applicant(s)

ADRIEN ET AL.

Examiner

Dwayne K. Handy

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5 and 44-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5 and 44-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 56 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 56 recites the limitation of additional spacer segments *along the periphery of the bottom surface of the cover slip*. Applicant has ***already*** placed spacer segments that extend substantially contiguously with a full length of the opposed edges by amending claim 1. Therefore, it is unclear how additional spacer segments may be placed on the periphery of the cover slip bottom given that Applicant has claimed spacer segments extending along substantially all of the length of edges already.

Inventorship

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 5 and 44-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fisch (USPN: Re. 35,589). These claims were previously rejected under Fisch in view of Tolles. The rejection under Fisch in view of Tolles is removed. It was stated in previous Office Actions (mailed 6/17/04, 12/01/04, 2/23/06) that Tolles does not teach "a pair of spacer segments" that extends along substantially (now also contiguously – new claim 1 amendment) with a full length of a different one of the opposed edges. Upon further inspection of the Tolles reference, the Examiner believes Tolles DOES teach this

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feature. The Examiner has provided an annotated version of Figures 1A and 1B. As shown in Figure 1A, Tolles teaches a substrate (20), having a spacer element (23) and a cover slip (3 & 3'). The spacer element is comprised of a film of given height (column 3, lines 29-31) that extends along the substrate (20). The cover slip has two pairs of substantially parallel, opposed longitudinal edges bounding the bottom surface. The Examiner has labeled one of the edges from each of these pairs "A" and "B" in the annotated Figures. The Examiner then notes that when placed together as shown in Figure 1B, the spacer (23) contacts the bottom surface along the edge of the cover slip (3). In addition, the Examiner considers each portion of the spacer (23) that contacts the bottom surface of the cover slip (3) to be a "spacer segment". Given this interpretation, the spacer segments shown in the cross-sectional cut Figure 1B, extend completely along each pair of edges – again, labeled "A" and "B" - of the cover slip as required by the claim. Tolles also shows additional spacer elements spaced from the edge of the cover slip (instant claim 56) in Figure 1B.

6. Tolles does not recite the cover slip thickness of at least 0.85 mm and does not recite an area between spacer segments of at least 500 square mm. As argued in the previous Office Action (Paragraph 7), however, the Examiner takes the position that this thickness does not provide unexpected results over the thickness taught by Tolles. This is especially in light of Applicant's specification which does not give this thickness any criticality above 0.25 mm and defines the thickness anywhere between 0.3 – 2 mm as being sufficient thickness. The Examiner also takes the position again that the

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previous area cited by Applicant – about 200 square mm – represents only the minimum square area between the spacers since there is additional space past the grid. In addition, it would have been obvious to one of ordinary skill in the art to enlarge the area in order to examine as much material as possible. This would yield an area between the spacers that is greater than 500 square mm. Finally, the Examiner notes that The Federal Circuit has held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device (see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984)).

Response to Arguments

7. Applicant's arguments with respect to claims 5 and 44-57 have been considered but are moot in view of the new ground(s) of rejection. The Examiner notes Applicant's arguments to the cover glass thickness (page 6, lines 20-28), but directs Applicant to the Examiner's earlier statements on the criticality of the thickness from Paragraph 6.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McGrath et al. (5,192,503) and Freeman (5,958,760) teach reaction chambers formed from slides.


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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DKH
March 18, 2007


Jill Warden
Supervisory Patent Examiner
Technology Center 1700

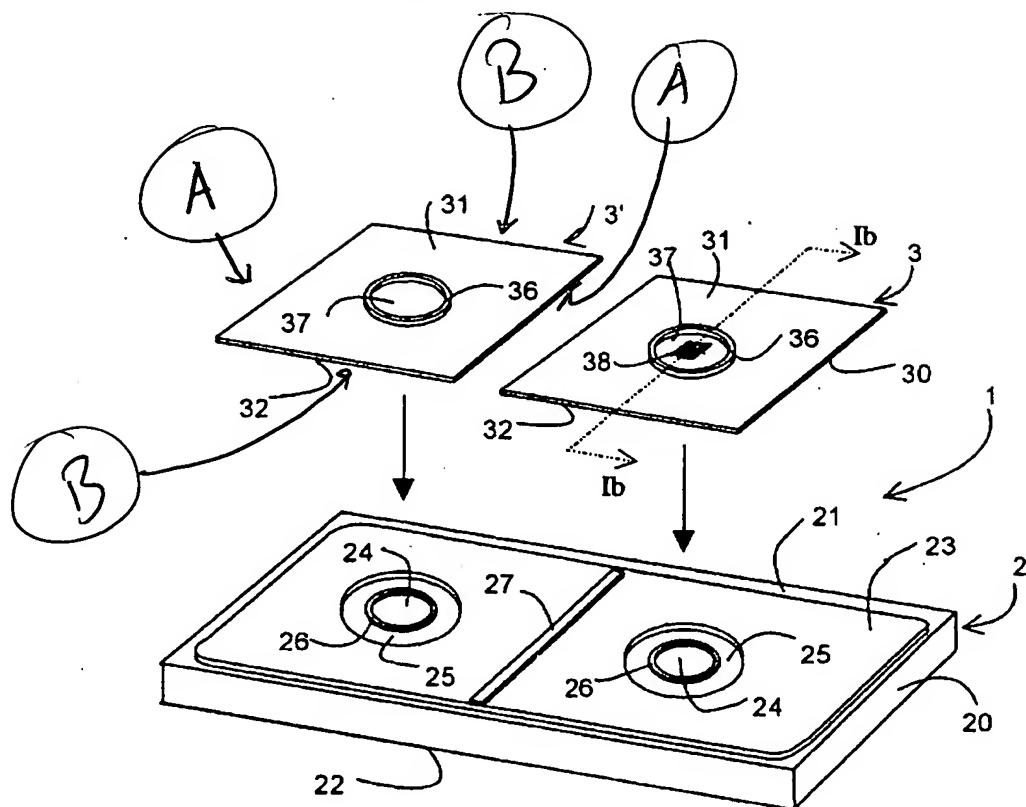


Fig. 1a

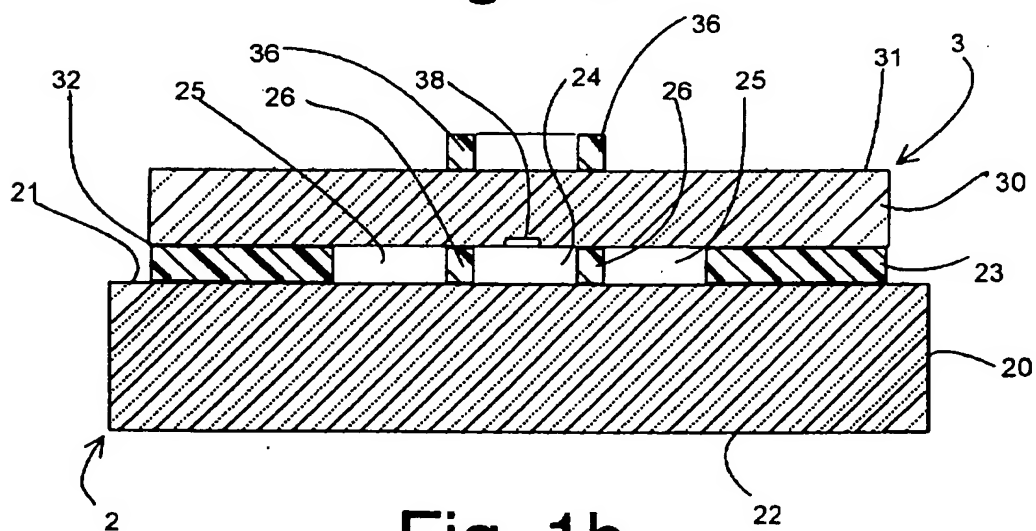


Fig. 1b